

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023834**Date Inspected:** 24-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

**WELDING**

This QA Inspector observed the following work in progress:

**BAY 14**

This QA Inspector observed ZPMC qualified welding personnel identified as 045175 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-039-001, 002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 240~250 amperes and 25.6 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067275 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-010-001, 002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 245~260 amperes and 25.1 volts, which appears to be in compliance with the approved WPS.

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This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform welding by Flux Cored Arc Welding (FCAW), on U Rib Splice plate. Weld joint is identified as X3305K-036-001, 002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 240~255 amperes and 25.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 045270 perform welding by Submerged Arc Welding (SAW), on Deck panel DP3168A to Deck panel DP3169A weld of OBG Segment 14W. Weld joint is identified as SEG3020-002. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-223(2)1T-ESAB-1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067949 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Deck panel diaphragm weld at panel point 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020E-002. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 245~260 amperes and 25.3 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066361, 067764 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to Sub assembly part SA3416 weld at panel point 128.7 of OBG Segment 14W. Weld joint is identified as SEG3020C-029. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 130~145 amperes and 24.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066239 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam flange weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020M-009. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 265~280 amperes and 25 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066881 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam flange weld at panel point 127.3 of OBG Segment 14W. Weld joint is identified as SEG3020K-004. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2232-ESAB. This QA Inspector noted welding variables were 270~290 amperes and 24.6 volts, which appears to be in compliance with the approved WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Upadhye,Anand	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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